

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the above-captioned patent application:

Listing of Claims:

1.(Currently Amended) A portable keying device that is configured for installing at least one encryption key into at least one electronic terminal, said portable keying device comprising:

a memory device for storing at least one encryption key; and

a communications unit coupled to said memory device, said communications unit being operative to transmit said at least one encryption key in a predetermined format to at least one electronic terminal, said predetermined format including a signal having an effective transmitting range of less than or equal to one meter;

said at least one electronic terminal includes a secure memory location for storing at least one data communications encryption key and is configured to employ said encryption key for the purpose of encrypting input data.

2. (Original) The device of claim 1, wherein the communications unit includes low power-close proximity RF transceiver.

3. (Original) The device of claim 2, wherein the predetermined format includes transmitting an RF signal at a predetermined power level.

4. (Original) The device of claim 3, wherein the predetermined power level is less than or equal to 1mW.

5. (Original) The device of claim 3, wherein the RF signal has an effective range of less than or equal to a meter.

6. (Original) The device of claim 2, wherein the predetermined format includes transmitting an RF signal in a predetermined direction.

7. (Original) The device of claim 2, wherein the predetermined format includes transmitting an RF signal having a predetermined polarity.

8. (Previously Presented) The device of claim 1, wherein the at least one encryption key is installed in the electronic terminal in accordance with a predetermined protocol.

9. (Previously Presented) The device of claim 8, wherein the predetermined protocol includes:

performing a handshaking routine, whereby the keying device and the electronic terminal exchange handshaking messages;

transmitting the at least one encryption key from the keying device to the electronic terminal in response to a successful handshaking routine;

validating the step of transmitting by re-transmitting the at least one encryption key from the electronic terminal to the keying device, whereby the keying device compares the transmitted encryption key to the re-transmitted encryption key; and

storing the at least one encryption key in the secure encryption key memory location in response to a successful step of validating.

10. (Previously Presented) The device of claim 8, wherein the step of validating includes transmitting a test encryption key from the keying device to the electronic terminal.

11. (Previously Presented) The device of claim 10, wherein the electronic terminal compares the test encryption key with a currently in-use encryption key stored in the secure encryption key memory location.

U. S. Patent Application No.: 09/854,756
Amendment Dated July 27, 2006
Reply to Non-Final Office Action of April 27, 2006

12. (Original) The device of claim 1, wherein the secure encryption key memory location is a memory location in non-volatile memory.

13. (Original) The device of claim 12, wherein the non-volatile memory includes E²PROM.

14. (Original) The device of claim 12, wherein the non-volatile memory includes EPROM.

15. (Original) The device of claim 12, wherein the non-volatile memory includes Flash memory.

16. (Original) The device of claim 12, wherein the non-volatile memory includes battery-backed RAM.

Claims 17-27 (Canceled).

28. (Currently Amended) A method for installing an encryption key in an electronic terminal, the electronic terminal including a secure encryption key memory location for storing the at least one encryption key, the method comprising:

providing a portable keying device, whereby the portable keying device is physically separated from the electronic terminal, said portable keying device being configured to transmit said at least one encryption key in a predetermined format to the electronic terminal, said predetermined format including a signal having an effective transmitting range of less than or equal to one meter;

performing a handshaking routine, whereby the keying device and the electronic terminal exchange handshaking messages;

transmitting an encryption key from the portable keying device to the electronic terminal; and

storing the encryption key transmitted from the portable keying device to the electronic terminal in the secure key memory location.

29. (Original) The method of claim 28, wherein the step of performing a handshaking routine includes transmitting an authorization signal from the portable keying device to the electronic terminal.

30. (Original) The method of claim 29, wherein the portable keying device provides the electronic terminal with a predetermined authorization code during the step of transmitting an authorization signal.

31. (Original) The method of claim 28, wherein the step of performing a handshaking routine includes transmitting RF signals having at least one predetermined transmission characteristic.

32. (Original) The method of claim 31, wherein the at least one predetermined transmission characteristic includes transmitting an RF signal having a predetermined range.

33. (Original) The method of claim 31, wherein the at least one predetermined transmission characteristic includes transmitting an RF signal in a predetermined direction.

34. (Original) The method of claim 31, wherein the at least one predetermined transmission characteristic includes a transmitting an RF signal having a predetermined polarity.

35. (Original) The method of claim 31, wherein the at least one predetermined transmission characteristic includes transmitting an RF signal having a predetermined modulation format that is characterized by a predetermined programming voltage.

36. (Previously Presented) The method of claim 29, wherein the step of transmitting an encryption key further comprises:

transmitting the at least one encryption key from the keying device to the electronic terminal in response to a successful handshaking routine;
validating the step of transmitting by re-transmitting the at least one encryption key from the electronic terminal to the keying device, whereby the keying device compares the transmitted encryption key to the re-transmitted encryption key; and
storing the at least one encryption key in the secure encryption key memory location in response to a successful step of validating.

37. (Previously Presented) The method of claim 36, wherein the step of validating includes transmitting a test encryption key from the keying device to the electronic terminal before transmitting the at least one encryption key.

38. (Original) The method of claim 37, wherein the step of validating includes the electronic terminal comparing the test encryption key with a currently in-use encryption key stored in the secure encryption key memory location.

Claims 39-41 (Canceled).

42. (Currently Amended) A portable key installation system for installing an encryption key, the system comprising:

at least one electronic terminal having a secure encryption key memory adapted to store the at least one encryption key, and a terminal communications unit coupled to the secure encryption key memory; and

a portable keying device including a memory adapted to store the at least one encryption key, and a device communications unit coupled to the memory device, the device communications unit being adapted to bi-directionally communicate the at least one encryption key in a predetermined format to the terminal communications unit, said predetermined format including a signal having an effective transmitting range of less than or equal to one meter.

43. (Original) The device of claim 42, wherein the terminal communications unit and the device communications unit include low power-close proximity RF transceivers.

44. (Original) The device of claim 43, wherein the predetermined format includes transmitting an RF signal at a predetermined power level.

45. (Original) The device of claim 44, wherein the predetermined power level is less than or equal to 1mW.

46. (Original) The device of claim 44, wherein the RF signal has an effective range of less than or equal to a meter.

47. (Original) The device of claim 43, wherein the predetermined format includes transmitting an RF signal in a predetermined direction.

48. (Original) The device of claim 43, wherein the predetermined format includes transmitting an RF signal having a predetermined polarity.

Claims 49-59 (Canceled).

60. (Currently Amended) A portable keying device for installing an encryption key into at least one electronic terminal, the portable keying device comprising:
a memory device for storing the at least one encryption key; and
a communications unit coupled to said memory device, the communications unit being operative to transmit said at least one encryption key to an electronic terminal according to a pre-determined format, said electronic terminal including a secure memory location for storing said encryption key, said pre-determined format including ~~at least one of:~~
transmission of an RF signal at a predetermined power level of less than or equal to 1mW, and transmission of [an]said RF signal in a direction that resides within an angular range of plus or minus 15 degrees or less of a predetermined direction, and the transmission of [an]said RF signal having a predetermined polarity.

61. (Currently Amended) A portable keying device for installing an encryption key into at least one electronic terminal, the portable keying device including:
a memory device for storing the at least one encryption key; and
a communications unit coupled to said memory device, said communications unit being operative to transmit said at least one encryption key to an electronic terminal via transmission of an RF signal having an effective transmitting range of less than or equal to one meter,

and where said electronic terminal includes at least one of the following: a keypad, a signature pad, a card reader, a bar code reader, and a point of sale retail transaction processing apparatus.